

Title (en)

Magnet assembly

Title (de)

Anordnung von Magneten

Title (fr)

Ensemble d'aimants

Publication

**EP 0687919 A1 19951220 (EN)**

Application

**EP 95303908 A 19950607**

Priority

GB 9412012 A 19940615

Abstract (en)

A magnet assembly comprises a pair of substantially aligned, spaced apart first magnets (1) having like poles facing each other; and one or more auxiliary magnets (2) axially aligned with the first magnets wherein all magnets in the assembly are axially aligned, whereby a magnetic field of sufficient homogeneity to perform a nuclear magnetic resonance (NMR) process is generated in a working region (6) laterally offset from the first and second magnets. An oscillating magnetic field generating assembly for performing an NMR experiment includes a set of electrical coils (3) connected to an oscillating electrical source (7), the coils being arranged between the first magnets (1) and such that the magnetic field generated by the oscillating magnet field generating assembly is also sufficiently uniform within the working region (6) to perform an NMR experiment. A shield (5) of electrically conductive material is positioned adjacent to and laterally offset from the set of electrical coils (3,4) whereby the magnetic field generated by the oscillating magnetic field generating means is asymmetrically offset from the axis of the first magnets (1). <IMAGE>

IPC 1-7

**G01R 33/34**; **G01V 3/32**

IPC 8 full level

**G01R 33/34** (2006.01); **G01V 3/32** (2006.01); **G01R 33/38** (2006.01); **G01R 33/44** (2006.01)

CPC (source: EP US)

**G01R 33/34** (2013.01 - EP US); **G01R 33/3657** (2013.01 - EP US); **G01R 33/3808** (2013.01 - EP US); **G01R 33/383** (2013.01 - EP US); **G01V 3/32** (2013.01 - EP US)

Citation (applicant)

- US 4350955 A 19820921 - JACKSON JASPER A, et al
- WO 9207279 A1 19920430 - OXFORD INSTR LTD [GB]
- US 4933638 A 19900612 - KLEINBERG ROBERT L [US], et al
- WO 9418577 A1 19940818 - OXFORD INSTR UK LTD [GB], et al
- WO 9314413 A1 19930722 - OXFORD INSTR UK LTD [GB]
- WO 9411748 A1 19940526 - OXFORD INSTR PLC [GB], et al

Citation (search report)

- [X] EP 0459064 A1 19911204 - SCHLUMBERGER LTD [US], et al
- [DA] WO 9411748 A1 19940526 - OXFORD INSTR PLC [GB], et al
- [DX] WO 9207279 A1 19920430 - OXFORD INSTR LTD [GB]
- [A] US 4350955 A 19820921 - JACKSON JASPER A, et al
- [X] R.L. KLEINBERG ET AL.: "Novel NMR Apparatus for Investigating an External Sample", JOURNAL OF MAGNETIC RESONANCE, vol. 97, DULUTH, USA, pages 466 - 485, XP023960894, DOI: doi:10.1016/0022-2364(92)90028-6

Cited by

CN108459041A; FR2762912A1; FR2837929A1; EP0774671A1; US5739687A; GB2449032A; FR2752946A1; GB2449032B; US9519075B2; WO2015171124A1; US7405563B2; WO2006043275A3; WO2007098204A1

Designated contracting state (EPC)

CH DE FR GB IT LI NL

DOCDB simple family (publication)

**EP 0687919 A1 19951220**; **EP 0687919 B1 20020828**; DE 69527887 D1 20021002; DE 69527887 T2 20030410; GB 9412012 D0 19940803; US 5646528 A 19970708

DOCDB simple family (application)

**EP 95303908 A 19950607**; DE 69527887 T 19950607; GB 9412012 A 19940615; US 48951195 A 19950612